

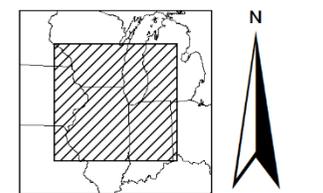
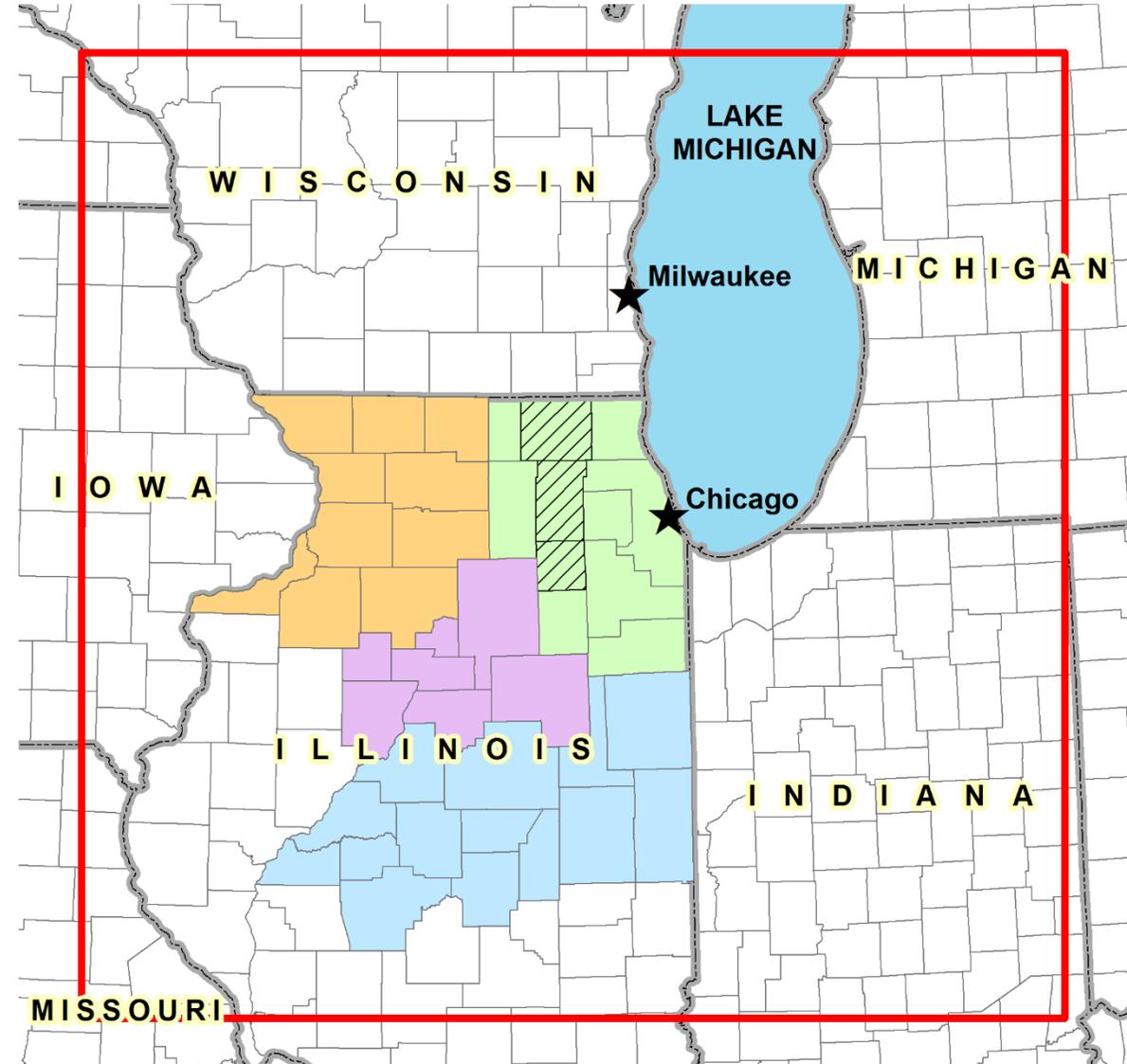
# Water 2050 Regional Forum: Update on Synoptic Measurement of Sandstone Aquifers

Illinois State Water Survey

January 15, 2015

# Water Supply Planning Regions

- A groundwater flow model has been developed for Northeastern and East Central planning regions
- These models are to be combined into one model that will also include the Middle Illinois and Northwestern Planning Regions



 Model area

## Models developed

-  Local Study Areas
-  Northeastern Illinois
-  East Central Illinois

## Current regional study areas

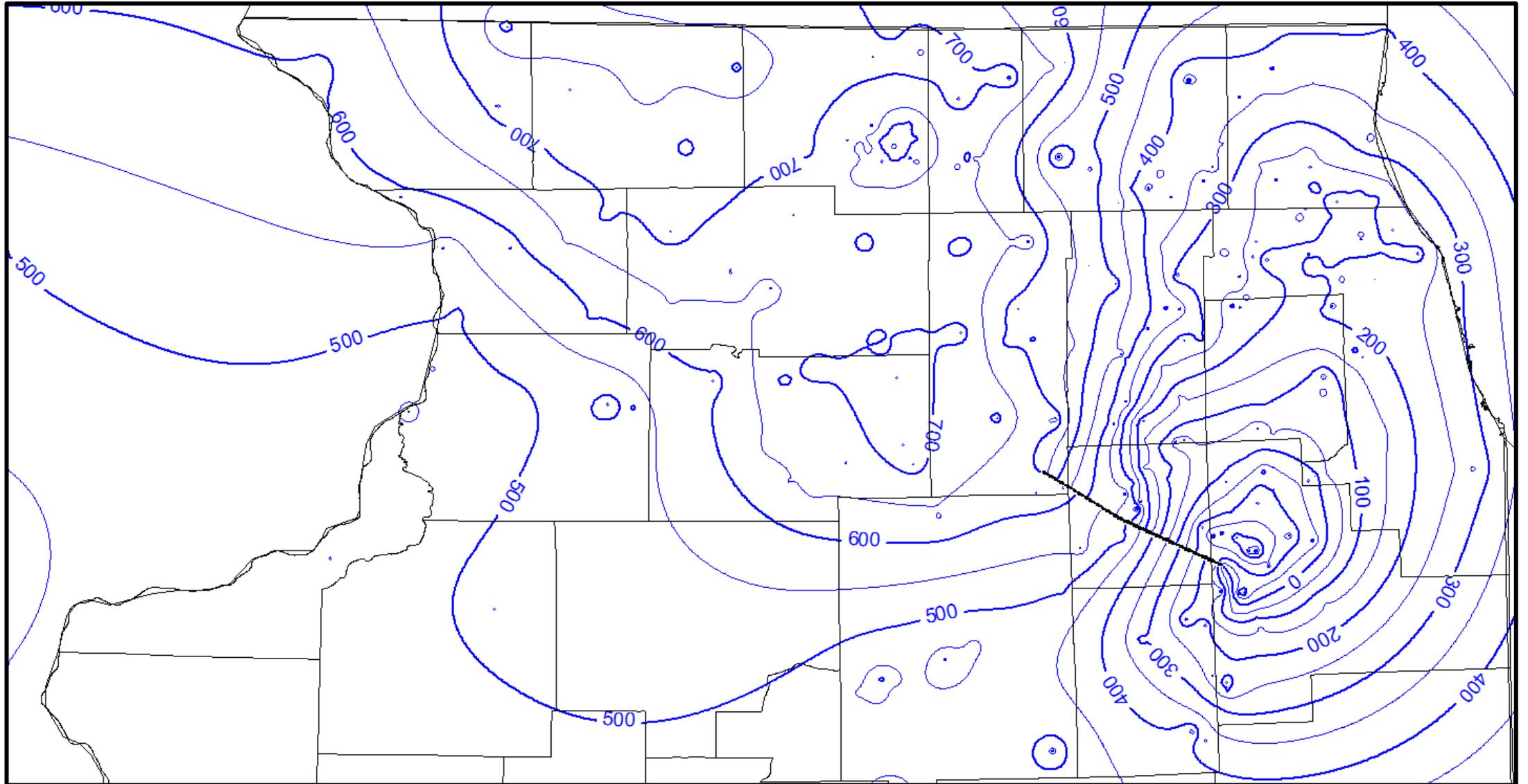
-  Northwestern Illinois
-  Middle Illinois

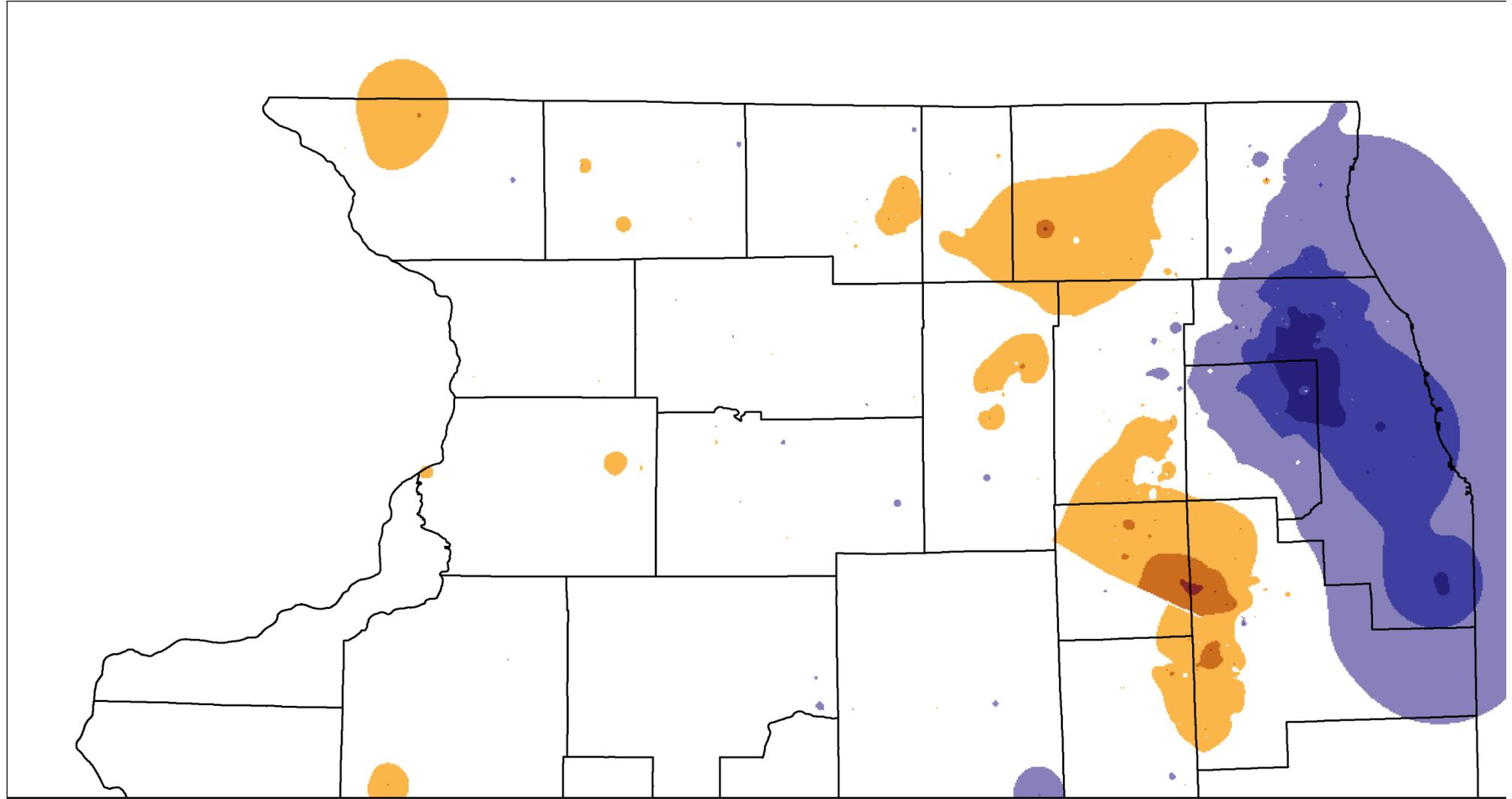
# 2014 Synoptic Measurement of Sandstone Wells



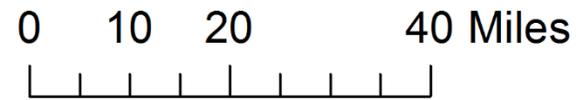
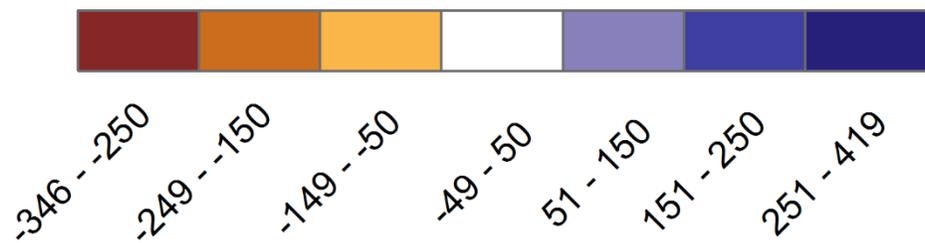
- We measured water levels under static (nonpumping) conditions
- 195 facilities were visited from July 2014 to present
  - 142 Public Water Supplies
  - 53 Self-Supplied Commercial and Industrial or Irrigation
- Over 500 wells have been measured thus far

# 2014 Mass Measurement- *Draft* Contours





**Head Difference 1980 to 2014 (ft)**



# 2014 Mass Measurement-Desaturation of the sandstone

- **Hatched Area:** Complete desaturation of the upper sandstone
- **Red:** Partial desaturation of the upper sandstone
- **Blue:** Head is less than 200 ft above the top of the upper sandstone

